receptor (RXR), and 9-cis retinol.

- 8. (Amended) A method according to claim 1 wherein said cell is additionally contacted with a member of the FGF family of growth factors.
- 10. (Amended) A method according to claim 1 wherein the neural stem cell or neural progenitor cell is pretreated with bFGF and/or EGF prior to contacting the cell with one or more factors obtainable from a Type 1 astrocyte of the ventral mesencephalon.
- 11. (Amended) A method according to claim 1 further comprising formulating a dopaminergic neuron produced by the method into a composition comprising one or more additional components.
- 19. (Amended) A dopaminergic neuron produced in accordance with claim 1.
  - 23. (Amended) A method according to claim 1 further comprising:
  - (i) treating a dopaminergic neuron with a toxin for said dopaminergic neuron;
    - (ii) separating the dopaminergic neuron from the toxin;
  - (iii) bringing the treated dopaminergic neuron into contact with a test agent or test agents;
  - (iv) determining the ability of the dopaminergic neuron to recover from the toxin;
  - (v) comparing said ability of the dopaminergic neuron to recover from the toxin with the ability of a dopaminergic neuron to recover from the toxin in the absence of contact with the test agent(s).
  - 24. (Amended) A method according to claim 1 further comprising:
  - (i) treating a dopaminergic neuron with a toxin for the dopaminergic neuron in the presence of a test agent or test agents;
  - (ii) determining the ability of the dopaminergic neuron to tolerate the toxin;

- (iii) comparing said ability of the dopaminergic neuron to tolerate the toxin with the ability of a dopaminergic neuron to tolerate the toxin in the absence of contact with the test agent(s).
- 25. (Amended) A method according to claim 23 further comprising formulating an agent which improves ability of a dopaminergic neuron to recover from or tolerate a said toxin into a composition comprising one or more additional components.
- 37. (Amended) A method according to claim 31 wherein a factor or factors able to induce a dopaminergic fate in a neural stem or progenitor cell expressing *Nurrl* above basal levels is or are provided in isolated and/or purified form.
- 38. (Amended) A method according to claim 31 wherein a factor or factors able to induce a dopaminergic fate in a neural stem or progenitor cell expressing *Nurrl* above basal levels is or are formulated into a composition comprising one or more additional components.
- 40. (Amended) A method according to claim 38 wherein the composition comprises a pharmaceutically acceptable excipient.
- 50. (Amended) A method according to claim 48 wherein a substance which modulates the ability of Type 1 astrocytes of the ventral mesencephalon, or a molecule or molecules thereof, to induce a dopaminergic fate in neural stem or progenitor cells expressing *Nurr*1 above basal levels, is formulated into a composition comprising one or more additional components.

## Add new claim 58 as follows:

58. (New) A method according to claim 24 further comprising formulating an agent which improves ability of a dopaminergic neuron to recover from or tolerate a said toxin into a composition comprising one or more additional components.